

Nat'l Bee-Keepers' Convention at Los Angeles, Aug. 18-20

# AMERICAN BEE JOURNAL

43d Year.

CHICAGO, ILL., JUNE 25, 1903.

No. 26.

WEEKLY



THE LATE  
RUFUS TOUCHTON, OF VENTURA CO., CALIF.  
(See page 404.)



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EDITOR,  
**GEORGE W. YORK.**

DEPT. EDITORS,  
 DR. C. C. MILLER, E. E. HASTY, EMMA M. WILSON

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- 1st.—To promote the interests of its members.
- 2d.—To protect and defend its members in their lawful rights.
- 3d.—To enforce laws against the adulteration of honey.

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**A Celluloid Queen-Button** is a very pretty thing for a bee-keeper or honey-seller to wear on his coat-lapel. It often serves to introduce the subject of honey, and frequently leads to a sale.



The pictures shown herewith is a reproduction of a motto queen-button that we are furnishing to bee-keepers. It has a pin on the underside to fasten it. Price, by mail, 6 cents; two for 10c; or 6 for 25 cents. Send all orders to the office of the American Bee Journal.

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The book contains 328 pages, is bound in handsome cloth, with gold letters and design; it is printed on best book-paper, and illustrated with over 100 beautiful original half-tone pictures, taken by Dr. Miller himself. It is unique in this regard.

The first few pages of the new book are devoted to an interesting biographical sketch of Dr. Miller, telling how he happened to get into bee-keeping. Seventeen years ago he wrote a small book, called "A Year Among the Bees," but that little work has been out of print for a number of years. While some of the matter used in the former book is found in the new one, it all reads like a good new story of successful bee-keeping by one of the masters, and shows in minutest detail just how Dr. Miller does things with bees.

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Your Name and Address on one side—Three Bees on the other side.



[THIS CUT IS THE FULL SIZE OF THE KNIFE.]

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**The Novelty Knife** is indeed a novelty. The novelty lies in the handle. It is made beautifully of indestructible celluloid, which is as transparent as glass. Underneath the celluloid, on one side of the handle is placed the name and residence of the subscriber, and on the other side pictures of a Queen, Drone, and Worker, as shown here.

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Please allow about two weeks for your knife order to be filled.



# ESTABLISHED IN 1861 AMERICAN THE OLDEST BEE-PAPER IN AMERICA BEE JOURNAL

43d YEAR.

CHICAGO, ILL., JUNE 25, 1903.

No. 26.

## Editorial Comments

**Soap to Remove Propolis.**—Editor Hutchinson is enthusiastic over the discovery of a soap called Lava soap, that is very effective in removing propolis from the fingers.

**Formalin**, frequently spoken of nowadays as a disinfectant of combs affected with foul brood, is the name of a particular preparation of formaldehyde. The name *formalin* is the property of the Schering Chemical Works, of Berlin, Germany, protected by United States and foreign patents, and is applied to a guaranteed 40 percent solution of formaldehyde; so that when "formalin" is bought, one may feel sure of a reliable article of a given strength.

**Start Queen-Cells in Full Colonies.**—Although by proper management the experienced queen-breeder may be able to have good queen-cells started in miniature colonies, the average beginner will do well to make it a rule to have all queen-cells started in full colonies. A single frame of brood with enough bees to cover, or partially cover it, may succeed in rearing a queen, but such queens would not generally be accepted as a gift by the experienced bee-keeper. Cells started in a full colony are none too good for him.

**Young Queens and Swarming.**—It was formerly held that if a colony had a queen of the current year's rearing, there would be no danger of swarming that season. After the introduction of Italian bees, whether it was the difference in bees or difference in treatment, it was found that the rule was not reliable. It is true, however, that there is less tendency to swarming with young queens, and it has been held by many that a colony with a queen of the current year would not swarm if the young queen had been reared in that hive. Even to this, however, exceptions have been reported.

**A Case of Long Caging.**—M. A. Gill reports in the Beekeepers' Review a case in which a queen was caged in a nucleus from about the middle of July till the 10th of October. She was then released, found laying on the third day, and proved to be a prolific queen. A confinement of 12 weeks in which the queen did not lay is a pretty strong argument in opposition to those who say that a queen is seriously injured by ceasing to lay for a few days. It also militates against the view that it is important that a queen should be allowed to lay to the fullest possible extent during the first year of her life.

**Untwisting that Twist.**—A friend who is solicitous for the harmony of the force upon the Bee Journal, writes:

"There seems danger of the editors of the 'Old Reliable' getting twisted up into a snarl over that twisting of the hive-cover, as appears in the closing words of our sprightly Afterthinker, page 362. Why not submit the matter to arbitration, and let me be chairman of the arbitration committee? I should rule that both are right.

"On page 276 the supposition is that a cleat is on the end of the board, that cleat so rigid that it does not in the least swerve from a straight line. Now, suppose that 28-inch board twists so that while one end of the cleat rests on the hive the other end is raised, making

at the middle a crack of a quarter of an inch. It is clear that the crack at the end of the cleat will be just twice as much, or  $\frac{1}{2}$  inch. But on page 362 no such rigid cleat is supposed. The end of the board is cleated so feebly that the end of the board is allowed to twist at its will, and instead of remaining in a straight line it will form a curve, and the quarter of an inch at the middle may become more than an inch at the end. See?"

There is no need of anxiety lest there be strained relations among the workers on this periodical. Rather than any hard feelings, either side would be willing to concede any kind of a cleat, or no cleat at all. But it appears quite clear that we may look from different standpoints.

**Don't Start Queen-Cells in a Time of Dearth.**—To get the best kind of queen-cells conditions should be as encouraging as possible. The fact of queenlessness is all the discouragement the bees ought to be called on to endure. When bees start preparations for swarming, if the weather turns bad so that no nectar can be gathered, the probability is that preparations for swarming will cease, and the incipient cells be torn down. Don't try to have cells reared at a time when bees would be discouraged from swarming. If, however, there be no nectar coming in, while the weather is at the same time favorable, the lack of forage may be helped by feeding thin syrup every night or every other night.

**Non-Swarming Chamber.**—The Simmins plan of preventing swarming by allowing constant opportunity for building comb below the brood-nest has been considerably in vogue in England, although for some reason no great success has been reported with it in this country. A non-swarming chamber is thus referred to by the British Bee Journal:

The non-swarming chamber is placed below the body-box primarily to give the bees room and occupation in comb-building, but when they have got started well at work the extra chamber, bees and all, is removed and placed above the brood-nest, when it becomes the surplus chamber for honey-storing; and by providing plenty of storage-room overhead in this way swarming is prevented.

**One Way of Starting Queen-Cells.**—The novice is likely to feel that the matter of rearing queens is so difficult that he dare not undertake it. Although other ways may be better for the professional queen-rearer, here is a way by which the veriest tyro may rear a few queens of particular stock and of good quality:

Look through your choice colony till you find the queen. Take the frame of brood on which you find her with its adhering bees, and put it, queen and all, in an empty hive, and add to it from the same colony another frame of brood and bees. That's all; the bees will do the rest. You have simply made the colony queenless, and the bees will proceed to rear a number of queen-cells that under proper conditions will be as good as the best. In nine days from the removal of the queen the cells may be cut out and used wherever desired.

**A Busy Bee-Keeper!**—The other day we received the following from one of our subscribers:

"Please stop the American Bee Journal, as I can not get time to open them, let alone to read them."

We may be wrong about it, but we think that any bee-keeper who is too busy to read his bee-paper is altogether too busy to fool with bees any at all. We can not see how a bee-keeper can put an hour or two each week to any better advantage than reading a bee-paper—that is, if he cares anything about making a success with bees. Some-

times a single item or article in any of the bee-papers is worth more than the subscription price for 10 years. Of course, we mean it is worth that if it is put into use by any live, up-to-date bee-keeper.

The fact is, that nearly all of us can find time to do whatever we really want to do. And it is truly so of the busy man—no matter how busy he is, he can always find time to do one thing more. It is usually the lazy, poky fellow who never has time for anything; and he is generally not asked to do anything, because those who know him best know that he never gets anything done.

**Cure for Bee-Paralysis.**—Many cures for bee-paralysis have been given, their authors confident of their efficacy, but upon further trial success did not follow. One reason for confidence in cures that do not cure is that frequently the disease disappears of itself, and then whatever remedy was last tried has the credit for the cure. In the hope that something, some time, may prove successful, it is well to give new remedies as they are offered. Here is one given in *Gleanings in Bee-Culture*:

I dug a ditch six inches wide and three inches deep in front of this hive, the ditch extending around to the sides of the hive. It is necessary for the hive to stand very close to the ground. The healthy bees will drag the diseased ones out and fall into this ditch, and have to leave the sick bee there, for it can't fly out; and all the sick bees that crawl out of their own accord will fall into this pit and can't get out, so you have these diseased bees trapped. I go out every evening and take up these dead bees, and burn them, destroying the disease-germ, hence I effect a cure. I have tried this remedy several years, and have never failed yet to cure a colony thus treated; in fact, I would not be in the bee-business to-day if I had not discovered this remedy. It usually takes about ten days to effect a cure.

## Association Notes

Mr. J. Q. SMITH, of Lincoln, Ill., has been appointed as Inspector of Apiaries for Illinois, as will be seen by the following:

ROUTE 4, SPRINGFIELD, ILL., June 19, 1903.

EDITOR AMERICAN BEE JOURNAL:—The Illinois State Bee-Keepers' Association met yesterday (June 18) at the State House, for the purpose of naming a foul brood inspector for two years, to carry out the provisions of the late Act of the Legislature. Mr. J. Q. Smith, of Lincoln, Ill., was chosen as such inspector.

It was the voice of the meeting that while the Act was in favor of the State Bee-Keepers' Association, all bee-keepers whose bees are affected with foul brood should have the attention of the inspector free of charge to them, except his entertainment; but that those who become members of the State Association should have the preference.

It was also the voice of the members present, that those who became members by paying their fee of \$1.00 to the Secretary, would secure also a membership in the National Association for one year.

JAS. A. STONE, Sec.

Now, those whose bees are diseased can call on Mr. Smith any time after July 1st, the date when the law goes into effect.

Every bee-keeper in Illinois should send his dollar to Secretary Stone at once, so as to get in line for the State Inspector in case he is needed. The same dollar will also pay a year's membership in the National. Better join at once, if not now a member of the State Association.

**THE NATIONAL CONVENTION IN CALIFORNIA.**—Editor Root is quite enthusiastic about the matter. Having been over the ground embraced in the trip, he knows what he is talking about. He says in *Gleanings in Bee-Culture*:

It was suggested that we make the Santa Fe route the semi-official one of the bee-keepers. A tourist sleeping-car could be made up largely of bee-keepers, to start from Chicago in time to give a day's stop-off at the Grand Canyon—probably the most remarkable scenery of the kind the world affords. The train is then to go on to Los Angeles, fitly named the "City of the Angels," one of the most delightful cities I have ever visited. It is not delightful because of its architecture, but because of the surrounding scenery and its bracing climate. Cool evenings and warm days make living there most enjoyable.

Board and lodging can be secured at very reasonable rates. In one of the good hotels of the city I secured a room at 25 cents a night, and board at 25 cents a meal, and the very best. There were other places where I could have had accommodations still cheaper. The bee-keepers there are a most hospitable set of fellows, and I shall not forget some of the pleasant hours spent with some of them.

This is a good year for California; and if one desires to see the real extent of bee-keeping possibilities in one of the fairest climes the world affords, let him take this trip. Do not go simply because you may get enough at the convention to pay you, but because your horizon of life will be enlarged, and because, years afterward, you can live over again (in memory) one of the most delightful trips you ever took. Just think of it! You can take a car in the morning in Los Angeles, and go to the coast and take a sea-bath. You can then come back to Los Angeles and eat strawberries and pick roses. In the afternoon you can go to Pasadena, a little city that is even more beautiful and more perfectly laid out than Los Angeles, where the great wealth of the East has been poured. Indeed, it is almost a heaven on earth. An hour's ride will take you up into the mountains, where you can get above the clouds—yes, may take a sleighride and enjoy a good snow-balling. Just think of it! a sea-bath in the morning, strawberries and roses at noon, a sleighride above the clouds, and snowballing, all in one day! Talk about going "from the sublime to the ridiculous!" This beats anything for a rapid change of season and scenery. While this is possible in the spring of the year, it may not be possible in August.

But one of the most thrilling trolley-rides (dangerously near precipices) that can be imagined is to take an electric car and actually glide above the clouds and look down upon the valley spread out like a panorama thousands of feet below. One can see the ocean, and the cities of Pasadena and Los Angeles, and all the small outlying towns, with their fine orange-groves and all the beautiful luxuriance of a tropical climate. In short, he can see typical Southern California.

Bee-keepers, if you fail to take in a trip of this kind (and it is the opportunity of a lifetime) you will be missing one of life's greatest pleasures.

**THE SPARTA, MICH., ordinance**, referred to last week, which declared bees in that city a nuisance, and that they must be removed on or before May 10, was finally dropped. As soon as Mr. France learned that the ordinance was to be passed, he sent the city authorities and others plenty of literature, and letters pleading for the members who were threatened. As soon as the ordinance was passed, Mr. France sent Pres. Hutchinson to investigate the case, and settle, if possible. He went, but could not then get settlement. A trial was arranged for, and when the city of Sparta went to Detroit to secure legal aid, they learned that the National Association had already engaged one of Michigan's best attorneys. The city officials of Sparta then returned and dropped the case, which was much to their credit. Another victory was thus gained for the National Association.

As reported before, there are now over 1200 members in the Association. In view of the excellent things (the above is an illustration) it is doing for its members and bee-keepers in general, the membership list should be doubled before fall. "In union there is strength."

Each bee-keeper should feel the necessity of standing by all other bee-keepers. Only by so doing can the rights of each and all be maintained.

## Sketches of Beedomites

### RUFUS TOUCHTON.

Mr. Rufus Touchton was for many years a prominent bee-keeper of Ventura Co., Calif. He died Oct. 9, 1902, after a weary struggle against the grim destroyer, Death. The local newspaper, published where he lived, said that his was an upright, conscientious life, ever performing the duties set before him, in domestic and public relations, in a manner that won him hosts of friends and the admiration of all. As one of the Supervisors of the county he served his constituents in an efficient manner. He was always a strong temperance man, and in anti-saloon contentions he stood faithfully by his own convictions and the promises he had made to his people.

Mr. Touchton was a native of Maryland, having been born in Havre de Grace in 1852. He went to California in 1875, and located near Santa Paula. He engaged in bee-keeping and honey-production, and was considered one of the best apiarists in that State.

In 1894 Mr. Touchton was elected Justice of the Peace in Santa Paula, and served four years. In 1898 he was chosen Supervisor from his district.

A large concourse of people attended the funeral services, thus showing their esteem for their departed friend and neighbor.

The foregoing biographical notes were furnished us by Jno. G. Corey, a venerable bee-keeper of the locality in which Mr. Touchton resided so long. This short sketch should have appeared long ago, but was not furnished us until early this year, and has been overlooked.



## Convention Proceedings

### Chicago-Northwestern Convention.

Report of the Chicago-Northwestern Bee-Keepers' Convention, held in Chicago, Dec. 3 and 4, 1902.

BY OUR OWN SHORTHAND REPORTER.

(Continued from page 391.)

Pres. York—We have spent a good deal of time on this subject, and Mr. Moore has an article somewhat along this same line. After he has read it, we will take up the question-box. We will now listen to Mr. Moore:

#### THE FUTURE OF THE NATIONAL, AND THE DUTY OF AFFILIATED ASSOCIATIONS.

The future of the National Bee-Keepers' Association is a theme that is of interest to all of us. Two years ago we raised the war-cry of "1000 members for the National!" and now we have it. Let us, here and now, in this Great City, at the center of population and energy for the Great West, raise high the cry "10,000 members for the National!"

And shall we not have it? Is there any impossibility inherent in this high aim? Let us consider for awhile a few phases of the question.

The United States Department of Agriculture reported that in this country there are over 700,000 who are engaged in apiculture on a large or small scale.

The bee-hive factories and supply dealers are sending out their catalogs to from 150,000 to 200,000 different addresses.

The bee-periodicals have about 25,000 paid subscribers.

Is there anything impossible or wonderful in an association of 10,000 members from this host of over half a million strong.

So it is settled that we are to have 10,000 members in our National organization in the near future. The Good Book says, "According to your faith be it unto you;" and our faith is more than equal to this height.

We shall proceed to mention a few of the steps up to the full realization of high ideals.

First, at the election for General Manager held this month, let us elect to this high office *the best man* in our ranks, regardless of location, controversies, or any other disturbing element that may seem to complicate the situation. The only one thing that should be considered is, Who will serve the National best, and lead her up to the highest points of success and influence? Then having recorded the will of the majority, let our whole 1000 officers and members go forward in the New Year, resolved to put petty differences and jealousies behind them, and work for great things for the bee-keeping world.

Publicity and promotion are, in any business enterprise, of first importance. At the World's Fair held in our city in 1893, Moses P. Handy was employed at a salary of about \$10,000 a year, and his sole function was to let the world in all languages know what we were doing and proposed to do at Chicago. No doubt the Great Fair would have been a failure without the Bureau of Publicity and Promotion.

We are now in the 20th Century, and 20th Century methods must prevail.

Our opportunities are great, our field of usefulness is large—wide as the Nation.

We must succeed grandly, or disgracefully fail; there is no middle ground.

We must have our "Bureau of Publicity and Promotion" if we are to achieve great things.

Let every bee-paper in the land run a column in every issue, headed, "What the National is Doing." Let the officers, especially the General Manager, be responsible for the supply of copy to every bee-paper in America, small and large.

In the opinion of the writer, hundreds are waiting to see the National *do* things, before putting in their dollars to help.

You can see by the quantity of material submitted in

the annual report what a large amount of readable copy could be made, and the skeptics would be speedily convinced that the National was *doing things*, and could also be trusted to *do more* in the future.

Therefore, let the National advertise, and advertise largely, and I venture to say that no bee-paper in the land would render a bill for space.

The National Association must in the future rise to a sense of its responsibilities and privileges as never before. It must look forward, and up, to plans and aims that may seem now out of reach.

In nearly every State in the Union laws are made to protect the interests of bee-keepers. It takes lots of money to influence legislation.

Look at Illinois. No foul brood law; no spraying-in-fruit-bloom law. It is distinctly one of the functions of a National organization to get laws that are needed by bee-keepers passed in all the States.

An Association of 5000 to 10,000 members, and having the power to levy assessments for proper objects, can raise all the funds necessary to put needed laws on the statute books in every State.

I am no prophet, nor even the son of one, but I venture that there will be no lack of members and money to accomplish any lawful end, when bee-keepers all over the land realize that the National is going to do things on a scale commensurate with the size and wealth of our beloved country.

One of the laws greatly needed is a law of Congress forbidding the use of the word "Honey" on anything except *real honey gathered by honey-bees*.

Right here I want to whisper that this is a land and an age of majorities, and *if you wish to lead* it is wise to take your hat in hand, and say to the great body of the plain people, who finally settle everything in this country, "Sirs, what are your wishes?"

I will pass along to my next head:

#### THE DUTY OF AFFILIATED ASSOCIATIONS.

This was one of the greatest and wisest laws ever passed by our governing body, allowing any association to join in a body at half price. This has helped to the 1000 mark. Our General Manager will confer a favor on us all by giving the total of members affiliated in this way since the law was passed.

Let us not think that our duty is done when we pay our dollar. Every member must have and feel a personal interest in the work of the National. Any General Manager will welcome letters from the members with suggestions as to any phase of our work.

Let us talk up the National to our bee-keeping friends. Urge them to send in their dollar right away. Tell them they never know when trouble may come, and then it is too late.

Suppose every one of our 1000 should be a committee of one to get new members, does any one doubt that we could average two new members for each old member? and lo, we have 3000 members! Next year we have 27,000 members.

How important it is to get the membership aroused to action. No one person can do it all, but "united we stand," and nothing is impossible for us. No argument is necessary to prove that all questions are safe in the hands of the people, and sure to be decided rightly, if the majority really speaks. Therefore, let all affiliated associations send in to the General Manager nominations for all offices in the gift of the Association.

I need hardly mention as one of our duties, to join promptly again on expiration of membership, and remit promptly for the same. For only with the "sinews of war" can we do battle for the right and the interests of bee-keepers.

HERMAN F. MOORE.

#### WINTERING BEES ON HONEY-DEW.

"Having nothing but a crop of honey-dew, how can I winter my bees on it?"

Dr. Miller—The first thing to know is whether that honey-dew is of the kind that kills bees. In some places they winter successfully on it. If the questioner has had experience with it he will know.

Pres. York—He can probably tell better next spring.

Dr. Miller—He may have tried in past years.

Mr. Wilcox—I had a very little experience with it, but I am rather inclined to the opinion that something can be done toward helping it by feeding sugar syrup. When that brood hatches out, feed sugar enough until they care for themselves, and they will get through the winter.

Mr. Watts—Some seven or eight years ago this occurred

to me: I had 120 colonies of bees all in strong condition. That season they gathered nothing but honey-dew, the first I ever experienced. Not being experienced at that time I didn't know what to do. I couldn't sell the honey, and couldn't do anything with it, and I told my wife we were going to lose all our bees. She laughed at me; but winter came on; the bees were on the summer stands; I left a lot of the surplus on the hives, but it was no use, in the spring my bees were all dead except two colonies. I lost the whole apiary. About three years ago we got another honey-dew crop, of a mild form. I sold that honey and the bees all died. I am afraid something will occur again, and I have no remedy.

Dr. Miller—I believe I would give them some syrup with the idea that they will take that first, and what they put in last they are likely to use first, and you will at least stand a better chance by having them use part of the sugar syrup.

Mr. Watts—Isn't it too late now to give them sugar syrup?

Dr. Miller—I should say ordinarily yes, decidedly. No sane man ought to give sugar syrup now, but in case of their being filled up with poison, I would run the chance of keeping them on that food.

Dr. Nussle—I would use one-tenth part of honey with the sugar syrup, if I had to import it from a neighboring State.

Mr. Abbott—If you have honey-dew you needn't run any risk feeding sugar syrup. Get granulated sugar and make a cake, and put it over the cluster, and my word for it, the bees won't eat anything else until that sugar is all gone. There is no reason why any bee should be fed syrup this time of the year. It surprises me that more isn't made out of this idea of feeding a sugar-cake. Five pounds of sugar will run any colony of bees through the cold weather that we have in Missouri, and which lasts during January. It is perfectly safe, easily made, and easily fed.

Dr. Miller—I want to accept the amendment. I hadn't thought of that. Mr. Abbott always has the cake of sugar with him "in his head." I don't. I ought to have had it.

Pres. York—Will Mr. Abbott please explain how they make the cakes of sugar for bees in Missouri?

Mr. Abbott—We simply get the best grade of granulated sugar and put just as little water in it as we can to make a liquid out of it in stirring up, then boil carefully, being careful not to burn it. My wife does it. She is the cook at our house. I used to cook, but I quit since I got married. She takes a little of it and drops it in cold water, and when it grains it is time to pour it out. Pour it into broad pans and make it about 1½ inches thick; and as she pours it in she stirs it a little, and that leaves little crevices that the bees can work into. I like it in the sugar form a little better. Then I put some sticks right over the cluster in January, and lay the cake on that, and put a canvas or something like that—something so there is no upper draft—and I have wintered a good many colonies without any honey of any sort, or anything to eat except that sugar. They will eat right through it, and the inside out of it, and sometimes leave a little, thin rim around it.

Mr. Wilcox—If you use crushed sugar mixed with honey and knead it to get the right consistency, wouldn't that answer just as well?

Mr. Abbott—It would answer until it run down over the bees.

#### IMPROVING BEE-PASTURE.

"How can I improve my bee-pasture?"

Dr. Miller—Sow sweet clover and catnip.

Mr. Wilcox—We have improved our honey-pasture wonderfully by sowing alsike clover. The farmers sowed it for the seed and found it profitable, and it is equally profitable for the bees.

Dr. Miller—Will alfalfa yield honey where you live?

Mr. Abbott—Yes, sir.

Dr. Miller—It doesn't in this locality.

Mr. Abbott—This must be a funny country.

Dr. Miller—I have been making inquiries for several years about it. Which side of the Missouri River do you live?

Mr. Abbott—I live on this side.

Dr. Miller—It is the first case yet reported that I have heard that alfalfa was sown along the Missouri River. I have been looking for this. They are telling us now at the experiment stations that we can have alfalfa grow and succeed in the State of Illinois by inoculating some of the soil, and I have been looking for that time to come.

Mr. Johnson—This is the plan that I have formed for the coming season: I went around to the neighbors and

agreed to supply them with one to five pounds of alfalfa seed at 25 cents a pound, and supply a small amount of inoculated soil. I can get it from the West from an uncle of mine. They are anxious to have it, and I see no reason why it shouldn't grow. I sowed one alfalfa patch. It takes about three years before it does anything, but it finally did well. I think it developed the germs itself. I think any alfalfa would finally develop those tubercles. Alfalfa is a clover, and in the different seasons it will yield here as well as anywhere. Sweet clover was a failure on account of being too wet.

Dr. Miller—Did you have your bees working on it?

Mr. Johnson—No, I did not.

Mr. McQueen—I have a patch of the alfalfa about half way to Elgin, and the bees worked strong this year. They did nothing with it last year.

Mr. Green—I am afraid Dr. Miller has not been reading his bee-paper thoroughly. There was a report from South Carolina of bees working very heavily on alfalfa there, but it was said they did not work the first year it bloomed.

Mr. Hutchinson—Is your patch on high or low ground, Mr. Johnson?

Mr. Johnson—It is not on low ground. It is on the side of a hill.

A Member—Alfalfa has to have well-drained ground. It has to have ground where water doesn't stand, ground where the rain can penetrate. It doesn't do well on heavy clay. On clover ground it will give honey in this country. I am going to try it next year.

Mr. Johnson—Nobody has tried alfalfa in this part of the country long enough—haven't had it long enough to decide that it doesn't produce honey. It takes a long while. It is on account of the bacteria, and I believe it will develop bacteria itself, and then it will produce honey.

Dr. Miller—I shall be glad to believe that. What about wild cucumber as a honey-plant?

Mr. Hutchinson—Bees don't work on it in this part of the country. I haven't seen a single bee on it.

Mr. Green—I watched them two years and saw only a couple, and they were gathering pollen.

Mr. Hutchinson—Near Dr. Gandy, in Nebraska, they get large crops of cucumber honey.

Dr. Miller—Is that the same thing?

Mr. Hutchinson—I don't know.

Dr. Miller—As I understand it, the kind of wild cucumber we are talking about, the sack is about as large as a butternut. There is a plant that the bees work on that looks like wild cucumber. We may be talking about different things. This pod, the seed is not like this at all. It is larger a good deal than this, the kind of wild cucumber we are talking about. There are only two seeds inside the pod, and they drop out and the cucumber dries up. We are talking about two different things.

#### PREVENTING PROPOLIS ON THE HANDS.

"While extracting how can I prevent propolis on my hands?"

Pres. York—Some one might suggest wearing mittens!

Mr. Wheeler—Wash your hands in kerosene.

Pres. York—The question is, How can I prevent?

Mr. Wheeler—Let some one else do the work.

Mr. Moore—Don't keep bees.

Mr. Abbott—You can prevent that sticking to your hands by oiling with sweet-oil, or something of that kind. I always oiled my hands before I began work.

Dr. Nussle—Oil or glycerine will prevent it from sticking to the hands to a great extent.

Mr. Wheeler—You can take it off very quickly with kerosene.

(Continued next week.)

**Honey as a Health-Food** is the name of a 16-page leaflet (3½x6 inches) which is designed to help increase the demand and sale of honey. The first part is devoted to a consideration of "Honey as Food," written by Dr. C. C. Miller. The last part contains "Honey-Cooking Recipes" and "Remedies Using Honey." It should be widely circulated by every one who has honey for sale. It is almost certain to make good customers for honey. We know, for we are using it ourselves.

PRICES, prepaid—Sample for 2 cts.; 10 for 10 cts.; 25 for 20 cts.; 50 for 35 cts.; 100 for 65 cts.; 250 for \$1.50; 500 for \$2.75; 1000 for \$5.00. If you wish your business card printed at the bottom of the front page, add 25 cts. to your order. Send all orders to the Bee Journal office.



## Contributed Articles

### Shaken or Forced Swarms—Questions Answered.

BY ADRIAN GETAZ.

I SHOOK a few swarms several years ago. The object I had in view was not to make swarms but to prevent them. The plan was to take all the brood out, put it on a new stand, and return it to the parent hive in five or six days.

As to preventing swarming, it was a complete success. None of the colonies thus treated offered to swarm. But the plan is otherwise objectionable, viz.:

1st. To carry it out on a large scale, it would be necessary to have a number of extra hives, which would involve a considerable cost.

2d. During the five or six days that the brood was absent, the parent colonies did nothing, or very little in the sections, but worked vigorously in the brood-chambers. And when I went to return the brood, I found the brood-chambers about half full of crooked combs, mostly drone, hanging from the supers. As a matter of fact, I expected to find some comb built in the brood-chamber, but I thought that with plenty of foundation in the supers, the bulk of the work would surely be done there. The locality, or rather the strength of the honey-flow, may have something to do with the results.

3d. The queens will go in the sections unless prevented by a honey-board. A honey-board is a nuisance, anyway, and also an expense.

4th. Some pollen was carried in the sections. I don't know how it could be prevented. The locality may have some bearing on this point.

#### MODERATE INCREASE.

A plan that will prevent swarming and secure a moderate increase consists in taking one comb of brood out of each colony every few days and replacing it with a comb of foundation. If the object is merely the prevention of swarming, the operation should be repeated as often as necessary, so as to furnish the queen enough room to lay. That may be as often as every fifth day, or perhaps only every tenth day, according to the size of the brood-chamber, the prolificness of the queen, the honey-flow, and other conditions.

As long as the queen has enough empty comb to lay in, there will be no swarming unless the queen is failing, or unless the lack of shade and ventilation renders the situation intolerable.

It will not do to put in an already built comb; the bees would often fill it with honey before the queen could lay in it. The reverse takes place when the foundation is given. But it is necessary even then to replace but one comb at a time, otherwise a portion of them would be filled with honey, as the queen could not lay in them fast enough to occupy them before the cells would be long enough to hold honey. I suppose that an already built comb shaved down would do as well as foundation, but I have not tried it.

Keeping in view the above experiments, I think I can answer some of the questions asked in a recent number of this paper.

#### WHEN TO SHAKE THE BEES.

Right here it must be remembered that a colony which will not attempt to swarm will do better if left undisturbed. The trouble is, we do not know in advance which will not swarm and which will. The plan suggests itself to watch the colonies and "shook" those that begin to prepare for swarming. The trouble is, that in order to carry out this plan, it would be necessary to inspect carefully each colony every fourth or fifth day. That is entirely too much work.

The only plans that remain are to treat all the colonies just before the swarming season, or put queen-traps on all (or clip the queen), and treat only those that actually swarm. If the locality and other conditions were such that the majority of the colonies were likely to swarm, I would advise the first plan, otherwise I would prefer the second.

#### COMB FOUNDATION OR WHAT?

What shall we put in the brood-chamber, foundation or drawn combs? In view of the experiments stated above, I

should say, emphatically, not drawn combs, by any means. The bees would fill them with honey at once. Starters will not do. Too many drone-combs would be built. Full sheets of foundation should be given.

#### CONTRACTION.

This is a point on which I have no experience and can only suggest. If other people's bees do like mine did, they would work nearly altogether in the brood-chamber, rebuild it, and nearly entirely neglect the supers.

I would suggest to contract the brood-chamber to three combs, so that the majority of bees would be compelled to work in the supers. Then as soon as three combs are occupied, add one or two more; and when these are occupied, add again, and so on. It would not do to leave the brood-chamber much contracted all the time, because the swarming fever might start again.

#### SHALL WE LEAVE A COMB OF BROOD?

No, unless it is sealed brood. After the bees have once begun to build queen-cells, they will keep it up as long as the circumstances are favorable, and there is unsealed brood. There must be a forced interruption of some sort, either to destroy the swarming fever, or rather the queen-cell-building fever.

#### SHALL WE "SHOOK" OR NOT?

In my opinion, no; decidedly, no. It is far better to keep the forces together than to divide. In shaking swarms, the swarm (on the new stand) cannot give any surplus. The parent colony loses the bees that are on the new stand; besides that, it has to rebuild its brood-nest. A double loss.

But can it be done? Can we keep the forces together?

Certainly we can. Cage the queens or requeen. In my locality, and with my system of management, only a small portion of my colonies swarm. The most satisfactory process with me is to let those colonies swarm that want to, return the swarms, destroy the old queens, and let them requeen out of their own cells. It is very easily done by having queen-traps on all the colonies.

#### A CONVENTION OF TWO.

Last winter I had a visit from Mr. Daniel Wurth, one of our best queen-breeders. It is hardly necessary to say that queen-rearing in all its aspects and details was the subject of our conversation. Mr. Wurth does not sell his queens direct to the consumers; he furnishes them through the supply-dealers. He insisted on the necessity of controlling the drones, and having drones to be good stock. He says it is not enough to Italianize the neighborhood and take the chances. His method is to put one or more drone-combs in several of his best colonies, keep them fed, and therefore have an abundance of good drones in the apiary. He says that if there are enough drones in the apiary, only an insignificant number of queens will mate elsewhere.

Among other questions, I asked him if he had darker queens in the fall than in the summer? He said he had some occasionally, not only late in the fall but also early in the spring. He thinks that the darker color may be due to the queen-cells being exposed to a too low temperature.

Knox Co., Tenn.



### Rearing Queens—Methods Discussed.

BY HENRY ALLEY.

WELL, now that the umbilical-cord humbug has died a natural death, and expired just about as quickly as most people supposed it would, we can now discuss subjects of more importance to the readers of this paper.

Mr. Doolittle lays a good deal of stress upon the fact that certain things he refers to can be found in "Scientific Queen-rearing." Yes, they can. One thing he refers to is the matter of rearing queens over and behind an excluder—that is, a queen-excluder. That is in his book, no doubt; but it never got there till I published it in the columns of the American Bee Journal. Many other things may be found in "Scientific Queen-rearing," but they did not get there until after they appeared in my first work on queen-rearing, in a book entitled "The Bee-Keepers' Handy-Book." This work, which had the largest sale of any book devoted to queen-rearing, and contained 180 pages, is now out of print.

A perusal of this work made it quite easy for several parties to write books on the subject of rearing queens.

The only difference, in the method of rearing queens, between Mr. Doolittle and myself, is that he makes artifi-

cial cell-cups, and I use only those built in the natural way by the bees themselves. Now, readers, which of the two methods, think you, is the best? In what respect do artificial cell-cups have any advantage over natural cells? Mr. Doolittle claims to follow natural laws and natural methods in rearing queens, yet he tells people to disregard natural ways and adopt unnatural principles, as they are better than the methods used by the bees themselves. What bosh!

I first gave to the world a way of having queen-cells completed above an excluder, and refer to back copies of the American Bee Journal in support of this claim. I first gave to the world a method of having queen-cells completed in the brood-nest, while a queen was present in the colony. In that latter case no excluder of any kind was used. Neither of the above systems is practical, for the simple reason that they cannot be used at all times. With the first system good work can be done while there is a good flow of honey. But even in this case, not as good queens can be reared as by another method, and that is why I discarded the entire arrangement.

If I could rear superior queens at all times, as Mr. Doolittle says he can by the excluder system, I surely would use it. I have tested the matter to my entire satisfaction.

Mr. Doolittle, if I remember correctly, made some adverse criticism on the fact that I reared good queens with a pint of bees. I had nothing whatever to do with rearing any queen with a pint of bees. The bees alone are responsible for the good work that was done. I merely took the queens from a very small hive of bees, and the queen that was introduced was destroyed, and this pint, or cupful, of bees reared a fine queen. To have been consistent with the ways some people do business, I ought to have destroyed that large, fine and beautiful queen because she was not reared in a 16-frame hive by a bushel of bees. Who says a cupful of bees won't rear a grand queen? Let's see:

In the American Bee Journal of May 4, Mr. Doolittle stated that he had a colony that built 174 queen-cells. Whew! Wasn't that a lot? Now let us dive into mathematics a little and see about how many bees by measure it took to rear those 174 queen-cells, or queens, as the case may have been. Now, at the rate of one pint of bees to a cell there would have been 87 quarts of bees. That is  $2\frac{1}{2}$  bushels and 7 quarts of bees in all. Did any one ever see a colony of bees that would measure  $2\frac{1}{2}$  bushels? Well, let's call it a cupful of bees and a queen. That would have made in measure a half pint of bees per cell. How many beekeepers ever saw a colony of bees that contained  $87\frac{1}{2}$  pints of bees. Now, why criticize my statement that a cupful of bees built a queen-cell and produced a superior queen? Does not Mr. Doolittle's statement fully confirm my claim that a cupful of bees will rear a good queen? But I do not believe there were three good, or fairly good queens produced in those 174 cells.

What does Nature do in rearing-queens? Do bees build half a hundred cells when they cast a swarm? No, not on an average over 12 cells, and hardly ever over 8 cells; that has been my experience.

Mr. Doolittle in a recent article shows where his bees did better than mine. I really think I could fill this entire volume of the American Bee Journal in showing that my bees did better than any other bees on earth. In all my catalogs, in which I gave testimonials of my bees in competition with others, I always omitted the names of the other dealer—never considered it fair to call names in such cases. I know there are always good reasons why some bees do better than others, and it is not always the fault of the bees, either. We all know that. Here is a case for the reader to consider:

A bee-man in Ayer, Mass., Italianized his apiary of 14 colonies. The bees bred up well, were very handsome and all the hives were full of bees. The dealer from whom those queens were obtained advertised the best strain of Italians on earth. But these bees never would work in the sections, and barely got a living. He sent for me to come for the bees. When I had looked them over, I said: How much do you want for the lot? His reply was: "Take them out of the yard." He said they were worthless and I could have them for nothing. Well, they were worthless, as honey-gatherers. But I destroyed the queens and bred the bees for forming nuclei.

Now, the fact that these queens were extra-prolific showed that the trouble was not in the breeding, but in the strain of bees.

Now, Mr. Doolittle and myself have sent out queens that were no better than the above, but in my case it was in the strain and not in breeding that caused the trouble. Mr. Doolittle is criticising me for the same things he is

guilty of himself. Sometimes a strain of bees does not prove to be what they gave promise of. But we all do the best we can. I always try to beat the other fellow in the production of the best bees and queens. The other fellow tries to beat me. We are all in the same boat.

Mr. Doolittle, why do you say your queens are better than mine? Dr. Gallup, your old teacher in queen-rearing, and a man in whom you take, or took, a good deal of stock, says your queens are no better than mine. He said it, didn't he, and no longer ago than last winter, in the American Bee Journal? Now, Mr. Doolittle, you would better go slow on this point, as I can show as many letters condemning your queens as you can against my queens.

A few words more and I am done this time. Mr. Doolittle has published to the world his method of rearing queens. I have done the same thing, antedating Mr. Doolittle a long time. I do not believe in hiding light under a bushel.

Now I will tell the readers of this journal how I rear queens, or rather how I produce queen-cells and have them completed. When I have eggs about ready to start queen-cell building, I select one of the strongest colonies of bees in my apiary to do the cell-cup building. This colony is taken into the bee-room, the combs all removed and the bees brushed from them into the cap of a bee-hive. I do this in such a way that the bees stay in the box till I find the queen, which is not long, I can assure you. When the queen is found the bees are then put into a box having a wire top and bottom. The top is the cover. The bees are right in this condition for a few hours. In the course of an hour they miss their queen, and a few hours later they are supplied with eggs and cell-building is at once commenced. The bees will construct as many cell-cups as eggs are given them.

In the course of 24 to 36 hours these cell-cups are divided among several of the strongest colonies in the yard. The queens from the full colonies are first removed say 12 hours before the cell-cups are placed in the hives. Now, I do not put these cell-cups behind nor over a queen-excluder. A comb is removed from the brood-nest and the cells placed between two frames of solid brood. Here they are left until completed, which is three days later. By this method there are two sets of bees working on each set or batch of cells. The cells built in this way produce queens superior to any I ever reared by any other system.

Does any reader of this paper know of a better system of rearing queen-bees? Do you, Mr. Doolittle, know of any that compares with it? If you rear good queens by your present method, you can rear much better ones by the one given above.

I have been accused of rearing queens by the nucleus system. Does any man who rears queens thus see any nucleus system in the above? The first year I reared queens, when I was not selling queens, I reared by the nucleus system. Bear in mind, I only reared queens in three days for amusement, and not for sale. I reared good queens, all the same.

Essex Co., Mass., May 14.

## Winter Ventilation and Porous Coverings— Some "Whys" About Them.

BY ARTHUR C. MILLER.

ON page 137, Mr. Hasty hesitates to give Mr. Holtermann's theories on porous coverings full endorsement. Mr. Hasty does well to qualify his support, and I hope to show that his doubt is well founded, and that Mr. Holtermann's theory is erroneous, not because it is his theory, for it is not his alone, but because the truth is otherwise.

During the winter, when bee-life is maintained at a minimum of exertion or visible activity, ventilation by fanning is unnecessary, and is not resorted to except under certain conditions, and then generally only at considerable intervals. But the air is steadily and constantly changing in the hive, whether the latter be a thin box or a thick chaff hive. This is due to two causes—the cooling of warmed air, and the development of carbonic-acid gas.

The normal temperature of the winter cluster of bees is 65 degrees F. The warmed air in and about this cluster slowly rises, spreads out over the top of the chamber, chills, settles and passes out the hive-entrance, other air drawing in to take its place.

Place a smoker containing a small and slow fire in an empty hive, replace the cover, and we have a visible



though crude illustration of the air-currents created by the bee-cluster.

Regarding the production and movement of carbonic-acid gas, I cannot do better than quote from Cheshire, condensing part and quoting part literally:

"During periods between visible feeding the bees are actually feeding upon the store of honey taken into the honey-sac, where it is held till appetite needs appeasing." The digested food passes into the circulation, is oxidized by the air breathed, and heat is involved. "A supply of fresh air to the cluster is clearly essential, for as the heat is in proportion to the honey consumed, so it is in proportion to the products of oxidation—the noxious gas (carbonic acid) and the water—as a reference to the following table will show, in which all but the main constituents of the honey have been disregarded for simplicity's sake.

24 oz. honey	9 oz. water—9 oz. water.
	6 oz. carbon—6 oz. carbon.
	8 oz. oxygen
	10 oz. hydrogen } —9 oz. water

"The 6 ounces of carbon being united with 16 ounces of oxygen from the air, we obtain 22 ounces of carbonic-acid gas, which, with the 18 ounce of water, are thrown into the air of the hive by the consumption of 24 ounces of honey."

"Let us trace the 22 ounces of carbonic-acid gas, occupying about 12 cubic feet at ordinary temperature. Dealing with a colony wintered on seven standard frames (the equivalent of 6 Langstroth frames), set  $1\frac{1}{2}$  inches from center to center, we find:

Seven frames, each $8\frac{1}{2}$ cubic inches wood	=	59 $\frac{1}{2}$ cubic inches.
20 lbs. honey, specific gravity 1.386	=	400 " "
$1\frac{1}{2}$ lbs. wax " " .965	=	43 " "
Pollen, estimated	=	20 " "
Bees	=	100 " "
		622 $\frac{1}{2}$ " "

"Disregarding fractions, this, subtracted from 1,500 inches (the solid contents of the hive) gives 878 inches, i. e., an air-space which we may for simplicity's sake regard as half a cubic foot, or 864 cubic inches. Therefore 12 cubic feet of carbonic-acid gas produced from the consumption of  $1\frac{1}{2}$  lbs. of honey, would fill the air-space in the hive twenty-four times. Nor is this all. Air is only one-fifth—by measure—oxygen, the other four-fifths being nitrogen; and carbonic acid occupies precisely the same space as the oxygen, which unites with the carbon to produce it. Therefore, if the whole of the oxygen introduced had been converted into carbonic acid, the air in the hive must have been entirely renewed 24x5=120 times; and further the presence of carbonic acid is so deleterious that 5 percent only of the oxygen could be utilized; the proportion being also limited by the laws of gaseous diffusion (interchange) in the breathing-tubes of the insect. Thus it is impossible to resist the conclusions that  $1\frac{1}{2}$  lbs. of honey cannot be oxidized for heat-production without the air of the hive being changed 2400 times."

"Authorities, with unusual agreement, state that the loss in weight of a wintering colony, in which breeding is suspended, is less than 2 pounds per month. With ordinary protection, this is about accurate, but it may be rather less than 1 lb. per month, or about  $\frac{1}{2}$  ounce daily. The  $1\frac{1}{2}$  lbs. would therefore represent 48 day's rations, and make the daily essential number of renewals of the air-volume of the hive to equal 2400 divided by 48 equals 50; i. e., the air of the hive, even during this very restricted food-consumption, would need to be changed completely during every 30 minutes.

To what extent such a change could take place through chaff packing or unpainted walls may readily be guessed.

As further evidence that no upward or lateral ventilation is necessary, either to rid the hive of its moisture or its foul air, I would cite the results of my experiments with hives so enclosed in tarred paper, that the only exit for air or moisture was the entrance. Colonies so protected winter perfectly. Furthermore, carbonic-acid gas is heavier than air, and settles. Providence Co., R. I.

**Amerikanische Bienenzucht**, by Hans Buschbauer, is a bee-keeper's handbook of 138 pages, which is just what our German friends will want. It is fully illustrated, and neatly bound in cloth. Price, postpaid, \$1.00; or with the American Bee Journal one year—both for \$1.75. Address all orders to this office.

## Our Bee-Keeping Sisters

Conducted by EMMA M. WILSON, Marengo, Ill.

### An Experience with Bees.

My father has always kept a few bees ever since I can remember. After he got too old to work he kept more bees, and I helped him. I made, or rather put together, the sections, put in the foundation or starters, and got them ready to put on the bees; helped him take off the honey, cleaned off the sections, and cased it ready for market, etc. Since he left us, in April, 1892, in his 89th year, my sister and I have run the apiary. We did all the work ourselves till the last two or three years, when our brother has helped us some. (I have had the rheumatism so much that I can't do half the work I used to, so our brother has taken my place and does whatever I am unable to do.)

The spring of 1892, if you remember, everybody lost nearly all their bees. We were left with 18 queens and a handful of bees, perhaps a pint to each queen. We fed them, and built them up, and increased them to 35 colonies, and that fall we sold about \$100 worth of honey. That year was a good honey-year—if we had only had the bees to gather it. Since that time we have had some good and some poor honey-years—more poor than good, though—only two good ones. One of the years we got 5563 sections of nice honey, and the other 4432. Some years we would get pretty nearly 1000, and once a little over 1500, and the other years less. Last year was a failure. We had less than 500 sections of honey, but it was about all salable honey. We had 70 colonies of bees. There was fall honey enough for them to fill their hives, and they went into winter quarters in good condition.

We have 60 colonies now, 5 of them rather weak. This has been such a cold, bad spring for bees that I do not know whether they are as strong as they would have been if it had been a warm spring.

We have just taken the cushions off of them, and put the sections on last week. We winter them on the summer stands. White clover has begun to bloom. We are in hopes that it will be a good honey-year.

I do not see any way in which "Our Bee-Keeping Sisters" department could be improved. I nearly always turn to that department first.

(MISS) L. C. KENNEDY.

Sangamon Co., Ill.

### Does the Bee-Work Herself?

The "Sisters" department of the American Bee Journal has pleased me so much that it is the first thing looked for in every edition. I had five colonies last year, but because of the illness of my sister, who has been helping me for years in the housekeeping, I have been compelled to dispose of several, not being able to do justice to the bees, as they must be looked after continually here, because of the prevalence of foul brood in this vicinity. I had one colony attacked last year, and I got rid of it only through considerable work and some little worry. I had good "crops" of honey every one of the five years that I have had bees, and last year it was a remarkably fine one. I do practically all the work myself, unless there is a rush, or some heavy work to do, when I call upon Mr. V. for assistance.

Hamilton Co., Ohio.

MRS. M. VAUPEL.

### Transferring from Gums—Ants.

We have 3 colonies now. The boys and I do the work. We found a swarm in the corn-field, so we took a hive and put it in, and it is doing nicely at work. It is very rainy here, but when it isn't raining the bees are busy. The boys found 2 colonies in the timber last fall, so they sawed the tree and brought it home. We had to move them this spring, so they have not swarmed yet. One bee-keeper here told us they would not swarm for two or three months on account of moving them, but I believe they have gone down in the old gum. They are very busy. We have plenty of red

clover, and it is all in bloom. There is plenty of white clover here, too.

1. I should like to get them out of the old gums. How shall we do it, and at what time? One is about six feet long and the other four feet, and they seem to be almost full. We only want to keep enough for our own use, as the boys are farmers and do not have much time to spend on them. These are the first bees we had anything to do with.

2. The ants are bad here. How can we get rid of them? Bourbon Co., Kans., May 21. MARY J. HALL.

ANSWERS.—1. Saw off at either end the part of the gum not occupied with bees, so they can not fill up any more. Then as soon as they swarm, hive the swarm and set it in place of the gum. Three weeks later drum the remaining bees out of the gum, and add them to the swarm, unless you want to make a separate colony of them. Then you can split up the gum and dispose of the combs. If you wish you can let the bees rob the honey out of the gum before splitting it up.

2. Generally the ants do little harm, and the bees are able to take care of them. You can kill them by setting for them Paris green mixed with honey. Put this on a dish and cover over so the ants can get in, but no bees.

### Hiving a Swarm from a Tree-Trunk, Etc.

I think that the department of the Bee Journal, devoted to helping women bee-keepers, can be made very useful. I have kept bees for more than ten years, yet sometimes I find some work connected with it as difficult as at first, and also that we may still continue to be learners. I do all the work without help, except sometimes a friendly neighbor helps with a ladder. I use the Alley drone-trap to catch swarms, yet sometimes the queen gets out at a place not well guarded. Yet here is a difficulty connected with the use of the trap. When the trap is full of drones on a hot day, and I go to release them, the bees are so enraged that I get many a savage sting, as was my experience yesterday. You will, perhaps, advise leaving off the traps and clip the queens. Well, I have not done this, on account of the great difficulty of finding the queens, being very near-sighted. Yet, with all the difficulties and obstacles I do take pleasure in keeping bees, and find some profit also. I have 15 colonies; keep only Italians. I use some hives of the Falconer make, but during the past few years have had the Danzenbaker hive, and like it very well. It is the best for comb honey, and comb honey is all I produce. Last year I had as fine honey in appearance and taste as any I ever saw. I had a good crop, and have sold all at a good price here at the home market, selling for cash at groceries and private families.

My location is in the city. I keep the bees in our backyard, overlooked and criticised by many observers. I do not find this so very pleasant, to be so much under observation; I mean all friendly, of course.

I have had trouble in regard to having swarms situated in very inconvenient places. I have sometimes put a hive above them with a small board to lead them in. They have nearly all gone in, and then all march out, and then fly off. I appreciate the answers in the Bee Journal in the question department. They often help me.

1. What is the best way to hive a swarm of bees that settles on the trunk of a tree or on a fence, sometimes on both sides of the fence?

2. What is the best time of the day to work with bees, in the forenoon or towards evening?

3. Is it advisable to shake off bees from a cluster taken from a tree before another hive lacking in bees? I have seen it advised, and tried it, but all the bees so shaken off were killed. The greater part went into the hive in which they were intended to go—a small part of the cluster, I mean.

Dutchess Co., N. Y.

S. E. WILEY.

ANSWERS.—1. Take the hive that you have ready for the swarm, and place the entrance close up to the swarm as possible. Gently smoke the bees to get them started to running into the hive, or you may brush a few of the bees into the entrance, either way will do; just as soon as a call is made they will all run in like a flock of sheep jumping over a fence. If the swarm is within reach it is an easy matter to hive them in this way. Just set the hive so the entrance will reach the bees.

2. Any time of day when the bees are gathering well. During the honey harvest bee-keepers that have many bees

usually work all day. If nectar is scarce, and bees gather only in the forenoon, then the forenoon is best.

3. Depends on circumstances. Better not try it unless you have had a good deal of experience with bees.

## Hasty's Afterthoughts

The "Old Reliable" seen through New and Unreliable Glasses.  
By E. E. HASTY, Sta. B Rural, Toledo, Ohio.

### BREEDING FROM INJURED QUEENS.

It is asking a good deal of us, and yet we cannot altogether blame the queen-breeders for asking it. You see, our faith gets low—and when it is clubbed still lower by what seems to be evidence of worthlessness, then to ask us to hold on, and breed one of those "house-flies" into a blessing! Ah, so! Yet a queen that *actually does* carry within herself valuable inheritances is not going to lose them by the personal injuries she gets going through the mail or otherwise. She herself may but poorly keep three frames full of brood, while her daughters could furnish the apiary with better bees than any it has ever had. But, then, there's the chap that would send us any old queen reared any old way from any old blood—perhaps we are watching out even too much for him. We won't *always* assume that a poor queen is valuable to breed from, Mr. Doolittle. We'll call on our smellers, and smell our way to the safe cases. Page 310.

### THE DAIRY AND THE APIARY.

But there's surely this difference between dairy and the apiary when we set out to improve the two: With efforts and cash enough behind it, the dairy has an unlimited food supply. Likely as not the apiary may be taking already pretty nearly all the supply in reach.—H. L. Jeffery, page 312.

### HIVING A BUNCH OF SWARMS IN A BOX.

Bad when three or four prime swarms mix. To hive the great mass in a dry-goods box, giving them room to store several pounds of honey—well, it is interesting to see that it succeeded twice. I should not expect it to succeed often. Page 315.

### A SWARM-BEATER.

Mr. Ford's record of 32 swarms in one day beats my time. And as they hummed they seemed to say, "Dance, tenderfoot, dance!" Page 325.

### ENAMELED CLOTH FAVORED.

Surprised as well as pleased to see that enameled cloth had a majority among Wisconsin. It's so handy that I have always adhered to it, although sometimes I feared I was a loser by so doing. If nine out of sixteen practical men favor it, I can go on and feel "chipper." Page 325.

### ALFALFA THIS SIDE OF THE MISSISSIPPI.

Still feeding us with the old story of no alfalfa honey this side of the Mississippi, I see. Just wait till they get it vaccinated for hay and honey. These are times of progress, and five years ago must be no criterion for five years hence. Page 326.

### THAT MARBLE-CAKE HONEY.

And Mr. C. P. Dadant finds late-extracted honey streaked with white and amber. I was almost tempted to wonder if that was not a trouble thought out in advance instead of a trouble experienced—but I'll say, "Wonder, lie down! don't you wonder this time." Somebody take a fruit-can and get up, marble-cake fashion, the streakedest can of honey it is possible to get up. Keep it in a warm room a week and see whether the streaks persist or disappear. I don't claim to know what the result will be. Page 326.

### THE DOOM OF THE FORESTS.

F. Greiner, on page 327, strikes into a subject of great importance to the whole country, as well as to us bee-folks—the utter destruction of wood, lumber and timber. And yet almost every one manages to maintain in regard to the rather dire situation just in advance a sort of complete



thoughtlessness. Not so with me. Perhaps I am too far the other way—find my heart feeling deeply sorrowful about the matter again and again and again. One of my best friends got through last winter by cutting down shade trees he thought he could spare. A great area of once

"wooden country" immediately to the west of here is getting as bare as the back of Calamity's hand. Few farmers seem to have started in to have a wood-lot; and those who did have, "massacred" it till it shows but here and there a forlorn-looking pole.

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17-25A3t

## FROM MANY FIELDS

### Good Weather Needed.

Bees are very populous, there being lots of brood. We have the finest crop of white clover we ever have had, but no weather that the bees can use it. We are getting some honey from alsike, raspberries and honeylocust. We have had three weeks of rain. We ought to have nice weather soon, then we might have the largest white clover yield we ever had. I run for extracted and comb honey. In the fall I put comb honey supers under extracting supers when the flow commences.

N. A. KLICK.

Stephenson Co., Ill., June 5.

### Too Cold for Bees.

This part of the country was struck by a very heavy frost last night, freezing a large variety of plants. Clover and raspberries are in bloom, with plenty of nectar in them. It is too cold for bees to work. Basswood is loaded with buds, especially the younger trees.

A. C. F. BARTZ.

Chippewa Co., Wis., June 12.

### Prospects Very Slim.

Bees came through this spring in very bad shape. I think one-half are dead in this county. There has been no rain to speak of, and everything is dried up. The prospects for white honey are very slim this year.

Orleans Co., N. Y., June 8. W. H. HEY.

### Feeding Bees in the Spring.

In my article on feeding bees in the spring, page 360, at bottom of the first paragraph reads, "they are stirred up and create more heat," should read, "are in accord with my experience." And the sixth paragraph begins: "The queen stops laying, and either part of the whole brood-nest is left unprotected," should read: "and either part or the whole brood-nest is left unprotected."

I have also experimented with feeding extracted honey, liquefied and made thin with water, in comparison with the candied extracted honey made soft by stirring, and working it to see what effect it would have on brood-rearing as well as on making the bees excited and leaving the hives, and find that just as much brood is being reared when the thick honey is fed, as by the thin liquid. And that, while the thick honey is fed, no bees leave the hive in cold weather, and consequently see a decided gain in feeding the honey in its thick stage, in preference to the thin liquid, for the thin honey causes great excitement and the loss of many bees in cold weather. It also requires a feeder for each colony, which amount is a good deal in an apiary of several hundred colonies, and, if they are not attached to the hive permanently, are a regular nuisance, and many of them get lost and broken. But with the thick honey, we don't need any feeder, and don't even have to take away the paper on which the honey was spread, if we don't want to, as the bees take care of it themselves.

Another thing I find practical in a large apiary for feeding, when the bees get short of stores in warm weather, is to thin the honey to the consistency of nectar by putting 20 quarts into a large-sized wash-tub, throw a scoop-shovel full of planer shavings on top for a float. Put three or four such tubs in the yard and just watch the "honey-flow." After 10 or 15 minutes, should any of the colonies not be working in the feed, open those

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BATAVIA, ILL., Aug. 21, 1901.

Dear Sir:—I thought I would let you know as to results of the nucleus sent me. They were placed in 10-frame hives and now they are in fine condition. From one I removed 24 pounds of honey and had to give 6 of them more room, as they were hanging out. They have more than reached my expectations.

Yours respectfully, E. K. MEREDITH.

DAVENPORT, IOWA, Dec. 31, 1901.

Your queens are fully up to standard. The honey queen that you sent my brother takes the lead. She had a rousing colony when put up for winter. The Goldenes can be handled without smoke or veil. Very truly yours,

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Notice.—No tested stock sent out before May 15. Send money by P. O. Money Order or Express Order. D. J. BLOCHER.

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hives and pour about a spoonful of the feed right among them, and see how quickly it will give them a "send-off."

Of course, the larger ones get the "lion's share," and, should, too, because they are just the very ones which need it most, for if we have a few small ones, they can be looked after very easily and supplied. I shall endeavor to keep a couple of barrels of fall honey on hand for such emergencies, instead of putting them on the market at a small figure, as I found it very handy to have nearly two barrels of it on hand this spring, for now my bees are in rousing condition to take care of anything that comes along in the shape of a honey-flow, and that, too, in spite of the horrid weather imaginable, so much so that I thought sometimes I would lose the whole of them. One of my near neighbors saved only 50 out of 300 colonies, and he claims those 50 are very weak.

A. C. F. BARTZ.

Chippewa Co., Wis., June 6.

### Cold, Bad Weather.

We are having very cold, bad weather here now. It is so cold that the bees can not work at all. The pastures are white with clover now. I hope it will warm up pretty soon.

Grant Co., Wis., May 30. U. S. BOYD.

### Doing a Rushing Business.

Bees are doing a rushing business. There is lots of white clover. I use double hives, and the queens have commenced to ramble in the upper stories, making themselves a nuisance in general.

WM. RUGGLES.

St. Joseph Co., Mich., June 12.

### Swarming—Handling the Smoker.

The pesky bees are driving me to "beat the band." I have tried to suppress swarming as much as possible, and thought I knew fairly well how to do it. Put on surplus cases very early; in fact, some time before fruit-bloom time, and then doubled them, which the bees occupied almost immediately, and have done splendidly in putting in surplus; hence, I flattered myself that I have little or no swarming. But, my, O my! They commenced the last of May to swarm, and have kept it up every pleasant day since. I have cut out queen-cells; moved the old hives to new stands; put on additional cases, which they occupy immediately, and apparently go to work; yet it's swarm, swarm. Is it the Gallup hive that causes all this trouble? or, is it because of very strong colonies? They are all very strong, which result I have aimed to bring about so as to be able to take advantage of the white clover and basswood; but I am afraid I've been like the Methodist preacher who prayed for rain—overdid it!

Say, what's the matter with Mr. Root? I'm with Dr. Miller in the proper manner of holding the smoker. Is Mr. Root cross-eyed? or is his thumb where his little finger ought to be? Perhaps he works the smoker with the nozzle turned half round, and blows the smoke over the bellows. He is certainly "way off" on the proper manner of holding the Cornell smoker, and I feel like telling him so; but as you know him better than I do, rather have you do it.

WM. M. WHITNEY.

Lake Geneva, Wis., June 13.

[Here is what Editor Root says in Gleanings in Bee-Culture, about the proper way to handle a bee-smoker.—EDITOR.]

Within the last five or six years most of the modern hot-blast smokers have been made in such a way that, while in use, the barrel will stand perpendicularly, leaving the coals of fire or hot embers to lie on the grate while the fumes free from sparks or embers are blown out through a curved or deflecting snout. The position of the bellows likewise during the interim mentioned has been reversed, putting the large end at the top instead of at the bottom, as heretofore.

I have been surprised many and many a time to see how awkwardly bee-keepers handle the modern smoker. To my notion there is only one way. The thumb should be on the



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side of the bellows next to the stove. This lets the hand hang in the natural position without any twist at the wrist. To handle the smoker, proceed as follows:

Stand in front of the hive, with the entrance at the left and the smoker in the right hand. With the left, pry the cover loose, then with the other holding the smoker in a perpendicular position, or only slightly tilted, perhaps, blow a little smoke over the tops of the frames. After the cover is removed, and the bees have been sufficiently quieted, set the smoker down close to the back end (not the front) of the hive on the ground. In doing this, the position of the wrist and hand does not have to be changed. Now, then, if the bees begin to act obstreperously, all one has to do is to reach down, grab the smoker in the most easy and natural way, and blow the smoke over the frames without twisting the wrist or the hand in an awkward, angular kink.

If one gets to using an implement wrongly, he will waste seconds, minutes, and hours of time as the weeks and months roll by. Every movement should be calculated to get the maximum results with the minimum of time and actual muscular force expended.

I have seen bee-keepers pick up the smoker in the left hand, hold it in an awkward way which I can hardly describe, and then when they were through lay the smoker down in front of the entrance, right in the height of the honey-flow. Or perhaps they will lay it on its side behind the hive; then when they want it for an emergency it can not be found.

### Outlook None Too Good.

The outlook in this part of the State is none too good. We have had no rain since March, and cold weather in April, and a very windy and dry May. I figure on a small average crop, and would be surprised to see prices go below the last year's, especially since Southern California is complaining, too.

SEBASTIAN ISELIN.

San Joaquin Co., Calif., June 8.

### A Terrible Season.

We are having a terrible season so far. It has been cold and stormy, and bees have done little or nothing. But we yet hope for the best. It looks pretty slim for a honey crop.

W. W. WHIPPLE.

Arapahoe Co., Colo., June 7.

### Working for Section Honey.

The way in which I find it necessary to work to get the best out of a colony is to work for section honey in a shallow hive (7½-inch frames). First, we will consider that our colonies are in good condition for the main flow, about June 12. Now, if all of my bees would swarm about 15 days before, I would be pleased; I should consider lack of nectar the only drawback. I have the swarm on the old stand with one-inch space under the frames, and in three days put on sections. The object in having a deep and large entrance is, that it is a great step in having all worker-comb built. It is a well-known fact to bee-keepers that bees wish to store this treasure away from the entrance and light. Therefore, the deep entrance forces the honey to the sections above, and the bees have a desire to build only worker-comb below.

Now, the parent colony: I shake and brush all of the bees it has on the frames, 14 days after the first swarm issues, into a new hive on 7 or 8 frames, with one-inch starters, the same as I did the first swarm, putting the frames in the same hive I take them from. In seven days more I again complete the last brush from the frames to the parent colony, and now the old stock is as strong as the first swarm, and will take a super and a few more frames of starters in the brood-chamber. If you prefer (I do) to feed honey in the frames in place of sugar syrup, just place the frames, which now have no bees on them, over the parent colony, and as it is just in the height of the honey-flow, and with drawn comb the parent colony will store more honey than the first swarm will in sections. The comb of

honey may be given to the colony that needs feeding in the fall, or it may be extracted. This practice has never failed to give good results.

In regard to keeping down increase, a swarm may be divided and a part given to the parent colony, and as it is in the height of the flow you will receive benefit from the bees you added, and it gives a fine crop of honey from both the swarm and parent colony; or, in other words, the parent colony is furnishing honey to feed such colonies that may need it. With an improved strain of bees I, in my locality, challenge the world in like condition and locality.

R. J. CORY.

Fairfield Co., Conn., June 13.

## Beedom Boiled Down

### Iron in Honey.

Prof. G. de Bunge says in Zeitschrift fuer Biologie that, among the hydrates of carbon which serve as foods, honey holds an exceptional place. Of all the sugary matters, honey is the only one containing iron; and strangely enough, almost exactly in the same quantity as found in white bread.—[Put this down as another point in favor of honey as food.—ED.]—Stray Straws in Gleanings in Bee-Culture.

### Are Balled Queens Suffocated?

Dr. W. G. Sawyer, replying to the remark that it "is not known whether a queen is killed by stinging or suffocation," says in the American Bee-Keeper:

Now, while I am not very well acquainted with the anatomy of the bee, it is reasonable to suppose that there is not very much difference in the suffocating qualities of the queen

**BOYS WE WANT WORKERS**  
Boys, Girls, old and young alike, make money working for us. We furnish capital to start you in business. Send us 10c stamps or silver for full instructions and a line of samples to work with. DRAPER PUBLISHING CO., Chicago, Ill.

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July 5th and 6th, at \$17.45 for the round trip, via Nickel Plate Road. Final return limit July 20th. Three trains daily to New York City and Boston. City Ticket Office, 111 Adams St., Chicago. 'Phone Central 2057. 11—25A3t

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**Muth Strain Golden Italians,** None Superior. **Carniolans,** None Better.

We guarantee safe arrival by return mail.

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Untested .....	\$1.00 each; 6 for \$ 5.00	Best money can buy .....	\$5.00 each.
Select Untested .....	1.25 each; 6 for 6.00	2-frame Nuclei with Select Untested	
Tested .....	2.00 each; 6 for 10.00	Queen .....	\$2.75
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the thinnest base. It is tough and clear as crystal, and gives more sheets to the pound than any other make.

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Special low price on queens in lots of 25 to 100. All queens are mailed promptly, as we keep 300 to 500 on hand ready to mail.

We guarantee safe delivery to any State, Continental Island, or European Country. Our Circular will interest you; it's free. Address all orders to

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PARKERTOWN, OHIO.

(The above ad. will appear twice per month only.) 16E13t  
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Incorporated 1866. 39th Session opens Sept. 2d. Subjects: Phrenology, the Art of Character Reading; Anatomy, Physiology, Physiognomy, Heredity, Hygiene, etc. Address: 24 E. 22d St., New York, care of FOWLER & WELLS CO.  
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is now in order. You have it in THE PAGE. PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH. Please mention Bee Journal when writing.

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### The Comb Honey Hive.

We sell it. We are authorized jobbing agents for THE A. I. ROOT CO., for Michigan. Send us a list of the goods you want for this season, and let us quote you prices. Beeswax wanted. Send for catalog. **H. M. HUNT & SON,** 10A17t BELL BRANCH, MICH. Please mention Bee Journal when writing.

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And Several Other Clover Seeds.

We have made arrangements so that we can furnish Seed of several of the Clovers by freight or express, at the following prices, cash with the order:

	5lb	10lb	25lb	50lb
Sweet Clover (white)....	\$ .75	\$1.40	\$3.25	\$6.00
Sweet Clover (yellow)....	.90	1.70	4.00	7.50
Alsike Clover .....	1.00	1.80	4.25	8.00
White Clover .....	1.50	2.80	6.50	12.50
Alfalfa Clover .....	1.00	1.80	4.25	8.00

Prices subject to market changes.

Single pound 5 cents more than the 5-pound rate, and 10 cents extra for postage and sack.

Add 25 cents to your order, for cartage, if wanted by freight, or 10 cents per pound if wanted by mail.

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## Tennessee Queens.



Daughters of Select Imported Italian, Select long-tongued (Moore's), and Select Straight 5-band Queens. Bred 3 1/4 miles apart, and mated to select drones. No bees owned within 2 1/4 miles; none imported within 3, and but few within 5 miles. No disease. 30 years' experience. **WARRANTED QUEENS**, 75 cents each; **TESTED**, \$1.50 each. Discount on large orders. Contracts with dealers a specialty. Discount after July 1st

Send for circular.

**JOHN M. DAVIS,**

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Very best of goods, largest stock in Indiana. Send list of goods wanted AT ONCE and get our

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Such investments are not speculative. The South is not a new country. Market and shipping facilities are adequate and first-class. The climate is mild and favorable. Notwithstanding these and other advantages, Southern lands are selling for prices far below their real value, and at present prices net large returns on the investment. For a free set of circulars, Nos. 1 to 10, inclusive, concerning the possibilities of lands in Kentucky, West Tennessee, Mississippi and Louisiana, on and near the Illinois Central Railroad, for homeseekers and investors, address the undersigned,

**A. H. HANSON, G. P. A., Chicago.**

### To Boston and Return at One Fare

for the round trip from Chicago via Nickel Plate Road, for Christian Scientists' meeting in June. Tickets on sale June 25th, 26th and 27th, with extended return limit of Aug. 1st. Stop-over at Niagara Falls, in either direction, without extra charge, and at New York, returning, on payment of fee of \$1.00. No excess fare charged on any of our trains. Write John Y. Calahan, General Agent, 113 Adams St., room 298, Chicago, for detailed information. 'Phone Central 2057. 6—22A5t



and the drone, and the drone will not suffocate when completely immersed in water for 15 minutes, and I have not found out how much longer. The first trapful of drones I submerged until all were quiet, then I emptied them out. The next day the drones were as thick as ever. I recaptured them, kept them under water 15 minutes and set them aside to "dry." About nine out of ten revived and were as lively as ever.

Is it not starvation that causes the death of a balled queen?

#### "Bunched" Swarms.

I frequently have in my out-yards what, for want of a better name, I call "bunched" swarms. During my absence of a week or more, several colonies may swarm on the same day, and go together; and their queens being clipped they can not go with them, and they will return and go into one or two hives, filling the inside and covering the outside, and spreading out on the ground in all directions—two or three bushels of them. There are quite too many bees in such hives or on them to do well; in fact, such will usually do nothing but loaf, and wait for a young queen to hatch. I have found it works well to take a peck or half a bushel of these bees and give them to a set of combs from which the bees have been shaken. With a dust-pan made with high sides and back I scoop up from such "bunched" swarms what bees I need to give to these beeless combs, and thus form new colonies which seem to do as well as any. Of course, I do not always have these large swarms to go to for bees; but when I do find my bees badly mixed in this way I can straighten them out in this manner, and make them all work profitably.—J. E. CRANE, in *Gleanings in Bee-Culture*.

**Close Saturdays at 1 p.m.**—Our customers and friends will kindly remember that beginning with July 1, for three months we will close our office and bee-supply store at 1 p.m. on Saturdays. This is our usual custom. Nearly all other firms here begin the Saturday afternoon closing with May 1st, but we keep open two months later on account of the local bee-keepers who find it more convenient to call Saturday afternoons for bee-supplies.

#### CONVENTION NOTICE.

**Texas.**—The Texas Bee-Keepers' Association meets in annual convention at the Agricultural and Mechanical College, at College Station, Texas, July 7 to 10, inclusive, during the Texas Farmers' Congress meetings. Cheap excursion rates. Large crowds. A good time. Learn a heap. Meet your fellow-men, and talk. Exhibits of all kinds of stuff. Premiums of all kinds awarded. Come, and bring what you have, and take home some of the premiums. You are invited. Be sure to be there. July 7 to 10, 1903, at the A. & M. C. of Texas, College Station, Hunter, Texas. LOUIS H. SCHOLL, Sec.

## The Emerson Binder

This Emerson stiff-board Binder with cloth back for the American Bee Journal we mail for but 60 cents; or we will send it with the Bee Journal for one year—both for only \$1.40. It is a fine thing to preserve the copies of the Journal as fast as they are received. If you have this "Emerson" no further binding is necessary.

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We will present you with the first \$5 you take in to start you in a good paying business. Send 10 cents for full line of samples and directions how to begin.  
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All my Queens are reared by the good old-fashioned system—the way they were reared when all queens lived three years—the bees stored lots of honey and gave such great satisfaction. These Queens are large, hardy, and reared from the best honey-gathering strain I ever saw. Queens not coming up to above guarantee replaced or money returned.

One queen, \$1.00; 3 queens, \$2.75; 6 queens, \$5.00; 12 queens, \$9.00. My new book on Queen-Rearing given to all who purchase three or more queens. Send for Catalog.

204tf HENRY ALLEY, WENHAM, MASS.  
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## 50 or 75 Nuclei For Sale

Good 3-frame Nuclei with Queens, strong pkgs. with bees, \$2.00 each. Safe arrival guaranteed. Customers all reporting satisfaction and duplicating and increasing orders. L. frames. German-Italian bees. No disease.

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## \$19.00 from Chicago to Boston and Return \$19.00

via Nickel Plate Road, account meeting of Christian Scientists, June 28th to July 1st. Tickets on sale June 25, 26 and 27, with open return limit of June 28. By depositing tickets with Joint Agent in Boston on July 1, 2, 3 or 4, and payment of fee of 50c., extended limit returning until Aug. 1st may be obtained. Stop-over at Niagara Falls, in either direction, without extra charge. No excess fare charged on any of our trains. Three trains daily. Through vestibuled sleeping-cars. American Club Meals served in dining-cars on Nickel Plate Road; also meals a la carte. Address John Y. Calahan, General Agent, 113 Adams St., room 298, Chicago, for reservation of sleeping-car space and other information. 'Phone Central 2057. 8—22A5t

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The only question to decide is where to get a handy wagon and get the best. The Farmers' Handy Wagon Co., of Saginaw, Mich., make one of the best if not the very best one made. This wagon has a long, broad platform and is equipped with either wooden or metal wheels. The wooden wheels are guaranteed in every way, being made of solid white oak, three thicknesses. The inner section presents the end of the grain to the tire while the two outer ones have the grain running crosswise of each other. The tire cannot be driven off with a sledge hammer nor can the wheel ever shrink so as to make the tire loose.

The metal wheels made by this company have the spokes swedged in instead of cast in. Spokes that are cast in come loose after a little wear, while those swedged in never come loose or rattle. The whole wagon is made on the same solid plan, and every part of it is guaranteed in every way. This company publishes a book about these wagons which shows by pictures and printed description just how it is made and what kind of a guarantee goes with it. The book will be sent free to any of our readers who ask for it and mention this paper. Address, Farmers' Handy Wagon Co., Saginaw, Mich.

## HONEY AND BEESWAX

### MARKET QUOTATIONS

**CHICAGO, June 5.**—The market is lifeless, no movement except extracted at low prices. Best grades of white extracted, 5½¢ cents; amber, 5¢5½¢. Comb honey is held at 15¢ for choice white, and anything not grading up to meet this requirement sold at 2¢5c less per pound. Beeswax, 32c. R. A. BURNETT & CO.

**KANSAS CITY, June 9.**—No comb honey in our market. White or light amber would sell quickly at \$3.50 for 24-section cases. Demand light for extracted, at from 5¼¢6½¢. Beeswax in demand at 25¢30c. C. C. CLEMONS & CO.

**ALBANY, N. Y., Mar. 14.**—Honey demand quiet; receipts and stock light. Comb selling, light, 15¢; mixed, 14¢15¢; dark, 13¢14¢. Extracted, dark, at 7¢7½¢. Beeswax firm, 30¢32c. H. R. WRIGHT

**CINCINNATI, June 1.**—Very little change in market from last report. We quote amber extracted grades at 5¼¢6½¢ in barrels; white clover, 8¢9¢; supply equal to demand. Comb honey, 15¢16c for fancy. Beeswax, 30c. THE FRED W. MUTH CO

**NEW YORK, May 21.**—Comb honey trade exceptionally quiet, very little doing. Fancy stock not plentiful and is sold at 14c. A large supply of other grades on hand, which we are quoting at from 11¢13c, according to quality, and in large lots make concessions from these prices. Extracted, unusually quiet, and prices show a downward tendency all along the line. Beeswax, firm at from 30¢31c.

HILDRETH & SPOHLER.

**CINCINNATI, June 8.**—We have reached the time when there is no settled prices in the honey market. Everybody is waiting to learn how the crop will turn out, therefore we will sell or ask the old price; fancy water-white comb brings 15¢16c. Extracted, amber, in barrels, 5¼¢5½¢; in cans, 6¢6½¢; white clover, 8¢8½¢. Beeswax, 30c. C. H. W. WEBER.

**WANTED WHITE CLOVER EXTRACTED HONEY!**  
Send sample and best price delivered here; also Fancy Comb wanted in no-drip cases.

THE FRED W. MUTH CO.  
324tf Front and Walnut, CINCINNATI, OHIO.  
Please mention Bee Journal when writing.

## WANTED!

**CALIFORNIA COMB HONEY** in car-lots. It will pay you to correspond with us.  
THOS. C. STANLEY & SON,  
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## WANTED—Extracted Honey.

Mail sample and state lowest price delivered Cincinnati. Will buy FANCY WHITE COMB HONEY, any quantity, but must be put up in no-drip shipping-cases.

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If you are interested in Sheep in any way you cannot afford to be without the best Sheep Paper published in the United States.

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**W. T. Falconer Mfg. Co.,**  
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over the Nickel Plate Road at one fare for the round-trip, within a radius of 200 miles from starting point. Tickets on sale July 3d and 4th, with return limit of July 6th. Through trains daily in each direction between Chicago, Cleveland, Buffalo, New York, Boston, and intermediate points. Every facility offered for the comfort of the traveling public. Individual Club Meals, ranging in price from 35c to \$1.00, and meals a la carte, in dining-cars on Nickel Plate Road. City Ticket Offices, 111 Adams St., and Auditorium Annex. 'Phones Central 2057 and Harrison 2208.  
13—25A3t

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and you may have part of it if you work for us. Uncle Sam's poultry product pays that sum. Send 10c for samples and particulars. We furnish capital to start you in business. Draper Publishing Co., Chicago, Ill.

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Very fine pure-bred BARRED PLYMOUTH ROCK Chickens and Eggs for sale at very low prices.

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The classic in Bee-Culture—Price, \$1.20, by mail.

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at all times.

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## THE JUNE FIRST NUMBER OF Gleanings in Bee-Culture



contains two very interesting articles, both of which are fully illustrated with new views, to-wit,

**Bee-Keeping in Jamaica**

—AND—

**Glimpses of Cuban Aplaries.**

Page 516 of this issue contains a price-list of the NEW

## Aikin Honey-Bags.

This new package for the putting up of Extracted Honey was fully described in the Mar. 1st number by Mr. Aikin. This is something that should interest every producer of liquid honey.

Gleanings one year and one Untested Italian Queen, \$1.00. We are mailing these promptly. Gleanings 6 months, 25 cents.

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